Abstract of the Disclosure

A fault-testing node for a connectionless data link has at least two opposing communication ports; a soft switch for controlling port-to-port data flow through the device; and an instance of software for modifying packet header information. The node enables loop-back testing by one or more port-to-port data flow paths being switched through activation of the soft switch to loop incoming packets back to the sender of the packets through the device and wherein the instance of software reverses the order of source and destination addresses of data units to insure acceptance of looped data units at the sender station.